CLAIMS

We claim:

 A computer-readable medium having computer-executable instructions for performing steps for directing data transfer in a computer having a plurality of transport modules, the steps comprising:

receiving transport specific data from an application;

determining at least one of the plurality of transport modules with which the transport specific data is associated;

passing the transport specific data to said at least one of the plurality of transport modules; and

sending a transport independent interface to the application.

- 2. The computer-readable medium of claim 1 wherein the application is an OBEX application.
- 3. The computer-readable medium of claim 2 wherein each of the plurality of transport modules has a transport protocol.
- 4. The computer-readable medium of claim 3 wherein at least one transport protocol is one of an IrDA protocol, an IP protocol, and a Bluetooth protocol.
- 5. The computer-readable medium of claim 1 having further computer-executable instructions for performing the step of initializing the at least one transport

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module.

- 6. The computer-readable medium of claim 5 wherein the at least one transport module is initialized by means of a transport interface.
- 7. The computer-readable medium of claim 6 wherein the transport interface comprises:

a command to initialize a transport;

a command to create a connection, the connection used for listening or for connecting to at least one other device;

a command to enumerate devices;

a command to enumerate properties; and

a command to close the transport.

- 8. The computer-readable medium of claim 7 further comprising computerexecutable instructions for performing the step of providing a transport socket interface when a connection is created.
- 9. The computer-readable medium of claim 8 wherein the transport socket interface comprises:

a command to close the connection

a command to listen for incoming connections;

a command to connect to at least one other device; and

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a command to enumerate properties about the connection.

- 10. The computer-readable medium of claim 9 wherein a transport connection interface is provided when one of the command to listen for incoming connections and the command to connect to at least one other device is executed.
- 11. The computer-readable medium of claim 10 wherein the transport connection interface comprises:

a command to close the connection;

a command to send data on the connection;

a command to receive data on the connection; and

a command to provide information about the connection.

12. A method to send at least one object between a first device and at least one of a second device comprising the steps of:

creating a primary interface;

finding the at least one of a second device;

connecting to the at least one of a second device through a device

interface; and

commanding one of a put command and a get command to transfer the at least one object between the first device and the at least one of a second device.

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- 13. The method of claim 12 further comprising the step of disconnecting the at least one of a second device.
- 14. The method of claim 12 wherein the primary interface comprises:

a command to enumerate transports;

a command to enumerate devices; and

a command to register a service.

15. The method of claim 12 wherein the device interface comprises:

a connect command to connect to a device;

a put command to put an object on a device;

a get command to get an object from a device;

16. The method of claim 15 wherein the device interface further comprises:

a command to disconnect à connection

a command to abort a request; and

a command to set a path.

17. A method to provide a service to at least one device, the method comprising the steps of:

listening for an incoming connection;

receiving a service connection interface when an incoming connection is received, the service connection interface for listening for incoming command

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requests;

listening for incoming command requests from the at least one device;
receiving a command structure when an incoming command request is
received that describes the incoming command request; and
performing one of a read and a write operation in response to the incoming
command request.

18. The method of claim 17 further comprising the steps of:

creating a primary interface having a register command to register a

service;

reading a transport data blob from a registry;

passing the transport data blob to the register command; and receiving a service interface from the primary interface to listen for an incoming connection.

19. The method of claim 17 wherein the service connection interface comprises:

a command to accept an incoming connection;

a command to close a connection;

a command to listen for incoming connections; and

a command to get the properties of a connection.

20. The method of claim 17 wherein the command structure comprises:

a pointer to an interface to enumerate headers that were received with a

connect request;

a command to generate a response code; and a stream interface to use to interface with a data stream.

21. The method of claim 20 wherein the stream interface comprises:

a command to read data from a stream;

a command to write data to the stream;

a command to read data\from a specified file; and

a command to write data to the specified file.

22. A computer-readable medium having computer-executable instructions for performing steps to provide at least one service to at least one device through at least one transport, the steps comprising:

providing a primary interface, the primary interface having a command to enumerate transports and to enumerate devices;

providing a transport interface for communicating with the at least one transport;

providing a service interface for determining when an incoming connection arrives; and

providing a device interface for communicating with the at least one device.

- 23. The computer-readable medium of claim 22 wherein the primary interface comprises:
 - a function to enumerate transports;
 - a function to enumerate devices; and
 - a function to register à service.
- 24. The computer-readable medium of claim 22 wherein the transport interface comprises:
 - a function to initialize a transport;
 - a function to create a socket;
 - a function to enumerate a list of devices of a specified type;
 - a function to enumerate properties required to create a listening socket;

and

- a function to close a transport.
- 25. The computer-readable medium of claim 24 having further computer-executable instructions for providing a transport socket interface if a socket is created.
- 26. The computer-readable medium of claim 25 wherein the transport socket interface comprises:
 - a function to close a socket;
 - a function to listen for incoming connections;
 - a function to enumerate properties about a socket; and

a function to connect to at least one of the at least one device.

- 27. The computer-readable medium of claim 26 having further computer-excutable instructions for providing a transport connection interface if at least one of the at least one device is connected.
- 28. The computer-readable medium of claim 27 wherein the transport connection interface comprises:

a function to close a connection;

a function to send data on the connection;

a function to receive data on the connection; and

a function to enumerate properties about the connection.

29. The computer-readable medium of claim 22 wherein the service interface comprises:

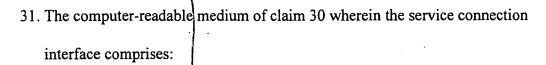
a function to listen for an incoming connection for the at least one service;

a function to shut down an instance of the at least one service; and

a function to set a password required to access the at least one service.

30. The computer-readable medium of claim 29 having further computer-executable instructions for providing a service connection interface if the incoming connection comes in.

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a function to accept a connection;

a function to close the connection;

a function to listen for at least one incoming command request from the at least one of the at least one device; and

a function to enumerate properties of the connection.

32. The computer-readable medium of claim 31 having further computer-executable instructions for providing a command structure if the at least one incoming command request is received.

33. The computer-readable medium of claim 32 wherein the command structure comprises:

a pointer to an interface to enumerate at least one header that came in with the incoming connection;

a function to generate a response code; and

a stream interface.

34. The computer-readable medium of claim 33 wherein the stream interface comprises:

a function to read data from a stream;

a function to write data to the stream;

a function to instruct the stream to use data from a specified file; and a function to instruct the stream to write data to the specified file.

35. The computer-readable medium of claim 22 wherein the device interface comprises:

a function to connect to a device;

a function disconnect the device;

a function to send data to the device; and

a function to get data from the at least one service.

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